查询LFCN-490供应商

Ceramic

# Low Pass Filter

## DC to 490 MHz

NEW!

## LFCN-490

BLUE CELL™

CASE STYLE: FV1206

| Model | Price | Qty. |
|---|---|---|
| LFCN-490 | $2.99 | (10-49) |
| LFCN-490D | $3.49 | (10-49) |

### Maximum Ratings

| | |
|---|---|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| RF Power Input* | 8.5W max. at 25°C |
| DC Current Input to Output | 0.5A max. at 25°C |

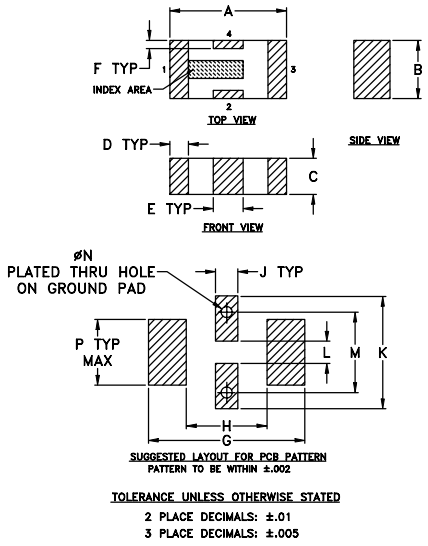
*Passband rating, derate linearly to 3.5W at 100°C ambient.*

### Pin Connections

| | |
|---|---|
| RF IN | 1** |
| RF OUT | 3** |
| GROUND | 2,4 |

**RF IN & RF OUT can be interchanged*

### Outline Drawing

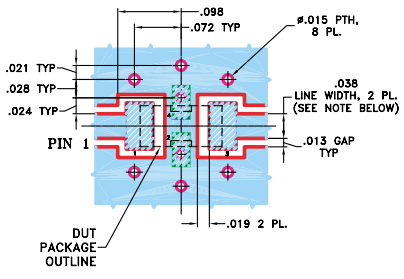



### Outline Dimensions (inch / mm)

| A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|
| .126 | .063 | .039 | .020 | .032 | .009 | .169 | .087 |
| 3.20 | 1.60 | 0.99 | 0.51 | 0.81 | 0.23 | 4.29 | 2.21 |

| J | K | L | M | N | P | wt. |
|---|---|---|---|---|---|---|
| .024 | .122 | .024 | .087 | .012 | .071 | grams |
| 0.61 | 3.10 | 0.61 | 2.21 | 0.30 | 1.80 | .020 |

### *Demo Board MCL P/N: TB-270*
### *Suggested PCB Layout (PL-137)*




NOTE:
1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350 WITH DIELECTRIC THICKNESS .020" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

DENOTES PCB COPPER LAYOUT

DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

### Features

- excellent power handling, 8.5W
- small size
- 7 sections
- temperature stable
- patent pending

### Applications

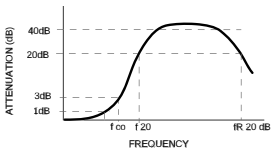
- harmonic rejection
- VHF/UHF transmitters/receivers
- RF suppression for DC lines on PCB
- anti-aliasing for A/D converter

### Low Pass Filter Electrical Specifications[1] ($T_{AMB}$=25°C)

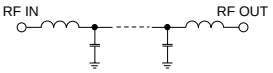
| MODEL NO. | PASSBAND (MHz) (loss < 1 dB) Max. | fco, MHz Nom. (loss 3 dB) Typ. | STOP BAND (MHz) (loss, dB) f 20 Min. | 40 Typ. | fr 20 Typ. | VSWR (:1) Stopband Typ. | Passband Typ. | NO. OF SECTIONS |
|---|---|---|---|---|---|---|---|---|
| LFCN-490 | DC-490 | 650 | 780 | 880-2500 | 6000 | 20 | 1.2 | 7 |

*1. For Applications requiring DC voltage to be applied to the Input or output, use LFCN-490D (DC Resistance to ground is 100 Mohms min.)*

typical frequency response

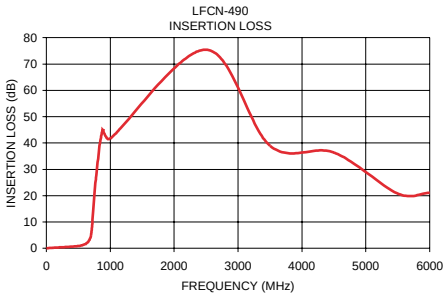


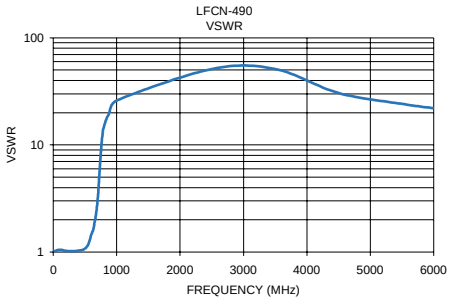

schematic




### Typical Performance Data at 25°C

| Frequency (MHz) | Insertion Loss (dB) | VSWR (:1) |
|---|---|---|
| 1.00 | 0.05 | 1.01 |
| 100.00 | 0.22 | 1.05 |
| 250.00 | 0.39 | 1.02 |
| 500.00 | 0.86 | 1.07 |
| 600.00 | 1.52 | 1.45 |
| 650.00 | 2.37 | 1.85 |
| 700.00 | 5.08 | 3.10 |
| 780.00 | 27.49 | 12.99 |
| 880.00 | 44.92 | 19.76 |
| 1000.00 | 41.68 | 25.94 |
| 2500.00 | 75.47 | 51.10 |
| 3500.00 | 38.94 | 51.10 |
| 4500.00 | 36.38 | 30.49 |
| 5500.00 | 20.80 | 24.14 |
| 6000.00 | 21.07 | 22.00 |




### *designers kit available*

| Kit No. | No. of Units in Kit | Description | Price $ per Kit |
|---|---|---|---|
| K1-LFCN | 35 | 5 each: LFCN-225, -320, -400, -490, -530, -575, -630 | 99.95 |

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